

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A mobile communication system comprising:
a content server for providing content data requested via a network;
a mobile communication terminal for issuing a request to provide said content data via a mobile communication network; and
a plurality of gateway units located respectively in predetermined areas, for executing protocol conversion of said request and said content data transmitted between said network and said mobile communication network and for continuously providing said content data from said content server to said mobile communication terminal by transmitting and receiving communication information to provide said content data, each gateway unit including an inquiry section, for inquiring of each of the other gateway units whether identification information of said mobile communication terminal is registered in a service management information storing section.

2. (Previously Presented) A mobile communication system comprising:
a content server for providing content data requested via a network;
a mobile communication terminal for issuing a request to provide said content data via a mobile communication network; and
a plurality of gateway units located respectively in predetermined areas, for executing protocol conversion of said request and said content data transmitted between said network and said mobile communication network and for continuously providing said content data from said content server to said mobile communication terminal by transmitting and receiving communication information

to provide said content data, wherein each of said plurality of gateway units comprises:

a service management information storing section for storing service management information including at least identification information of said content data so as to correspond to identification information of said mobile communication terminal to which said content data is provided via each of said plurality of gateway units;

an inquiry section, when said request is received from said mobile communication terminal, for inquiring of each of other gateway units whether said identification information of said mobile communication terminal is registered in said service management information storing section using said identification information as a search key;

a search section for searching said service management information in response to an inquiry from said inquiry section of an arbitrary one of other gateway units;

a communication information transmitting section, when said identification information of said mobile communication terminal is searched by said search section, for transmitting communication information used to provide said content data to said identification information of said mobile communication terminal to said gateway unit which has issued said inquiry;

a content request section for requesting said content server to provide said content data corresponding to said request based on said communication information transmitted by said communication information transmitting section of each of said other gateway units in accordance with said inquiry from said inquiry section; and

a content transferring section for transferring said content data from said content server, said content data requested by said content request section to said mobile communication terminal.

3. (Original) The mobile communication system according to claim 1, wherein said mobile communication network includes a plurality of radio communication base stations, each of said radio communication base stations which cover an area smaller than each of said predetermined areas and communicate one another, and at least one of said plurality of radio communication base stations transmits said request to a predetermined gateway unit among said plurality of gateway units.

4. (Original) The mobile communication system according to claim 3, wherein said request is transmitted to a gateway unit geographically nearest to said mobile communication terminal.

5. (Original) The mobile communication system according to claim 2, wherein said mobile communication terminal is a cellular telephone and said identification information of said mobile communication terminal is a telephone number.

6. (Previously Presented) A mobile communication system comprising:
a mobile communication terminal for issuing a request to provide content data via a mobile communication network;
a plurality of gateway units, each of said gateway units located respectively in predetermined areas and including a protocol conversion section for executing protocol conversion of said request and said content data transmitted

between a predetermined network and said mobile communication network, a request relay section for relaying said request and a terminal providing section for providing said content data to said mobile communication terminal in accordance with said request relayed by said request relay section and an inquiry section, for inquiring of each of the other gateway units whether identification information of said mobile communication terminal is registered in a service management information storing section; and

a content server for providing said content data to a gateway unit which has issued said request relayed by said request relay section via said predetermined network.

7. (Original) The mobile communication system according to claim 6, wherein said mobile communication network includes a plurality of radio communication base stations, each of said radio communication base stations which cover an area smaller than each of said predetermined areas and communicate one another, and at least one of said plurality of radio communication base stations transmits said request to a predetermined gateway unit among said plurality of gateway units.

8. (Original) The mobile communication system according to claim 7, wherein said request is transmitted to a gateway unit geographically nearest to said mobile communication terminal.

9. (Original) A mobile communication method in a mobile communication system including a content server for providing content data requested via a network; a mobile communication terminal for issuing a request to

provide said content data via a mobile communication network; and a plurality of gateway units located respectively in predetermined areas, for executing protocol conversion of said request and said content data transmitted between said network and said mobile communication network and for continuously providing said content data from said content server to said mobile communication terminal by transmitting and receiving communication information to provide said content data, said mobile communication method comprising:

a service management information storing step of storing service management information including identification information of said content data so as to correspond to identification information of said mobile communication terminal to which said content data is provided via each of said plurality of gateway units, said service management information is registered in a service management information storing section;

an inquiry step, when said request is received from said mobile communication terminal, of inquiring of each of other gateway units whether said identification information of said mobile communication terminal is registered in said service management information storing section using said identification information as a search key;

a search step of searching service management information of said each of said plurality of gateway units in response to an inquiry from an arbitrary one of other gateway units;

a communication information transmitting step, when said identification information of said mobile communication terminal is searched by said search step, of transmitting communication information used to provide said

content data to said identification information of said mobile communication terminal to said gateway unit issuing said inquiry;

a content request step of requesting said content server to provide said content data corresponding to said request based on said communication information transmitted by said communication information transmitting step in each of said other gateway units in accordance with said inquiry; and

a content transferring step of transferring the requested content data from said content server to said mobile communication terminal.

10. (Original) A mobile communication program used in a mobile communication system including a content server for providing content data requested via a network; a mobile communication terminal for issuing a request to provide said content data via a mobile communication network; and a plurality of gateway units located respectively in predetermined areas, for executing protocol conversion of said request and said content data transmitted between said network and said mobile communication network and for continuously providing said content data from said content server to said mobile communication terminal by transmitting and receiving communication information to provide said content data, said mobile communication program comprising:

a service management information storing step of storing service management information including identification information of said content data so as to correspond to identification information of said mobile communication terminal to which said content data is provided via each of said plurality of gateway units, said service management information is registered in a service management information storing section;

an inquiry step, when said request is received from said mobile communication terminal, of inquiring of each of other gateway units whether said identification information of said mobile communication terminal is registered in said service management information storing section using said identification information as a search key;

a search step of searching service management information of said each of said plurality of gateway units in response to an inquiry from an arbitrary one of other gateway units;

a communication information transmitting step, when said identification information of said mobile communication terminal is searched by said search step, of transmitting communication information used to provide said content data to said identification information of said mobile communication terminal to said gateway unit issuing said inquiry;

a content request step of requesting said content server to provide said content data corresponding to said request based on said communication information transmitted by said communication information transmitting step in each of said other gateway units in accordance with said inquiry of said inquiry section; and

a content transferring step of transferring the requested content data from said content server to said mobile communication terminal.